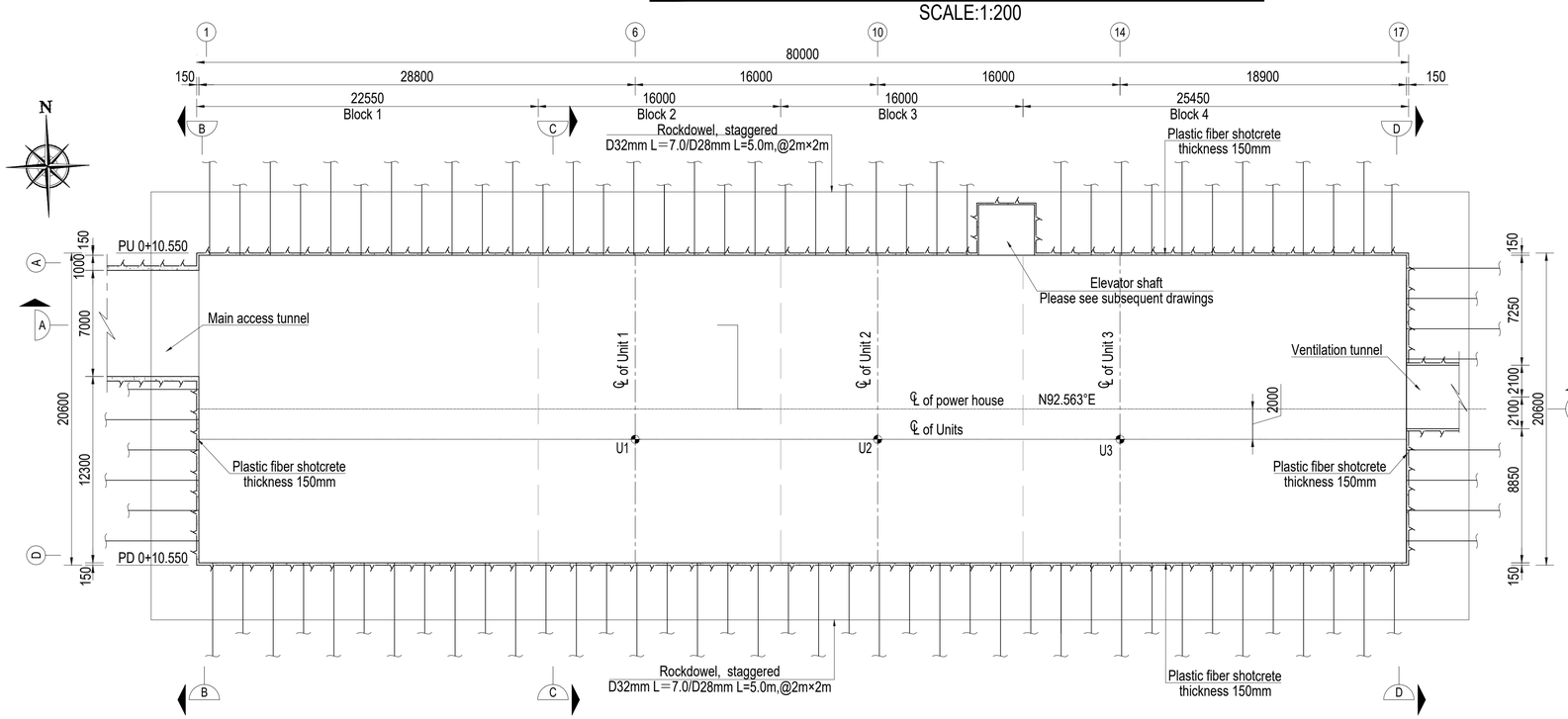
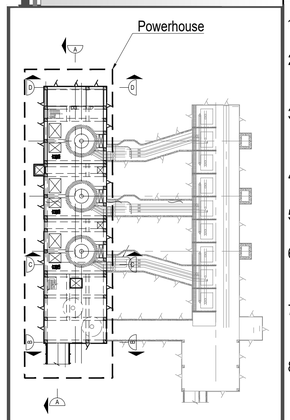
PLAN VIEW OF POWERHOUSE AT EL.921.50m

SCALE:1:200



KEY PLAN



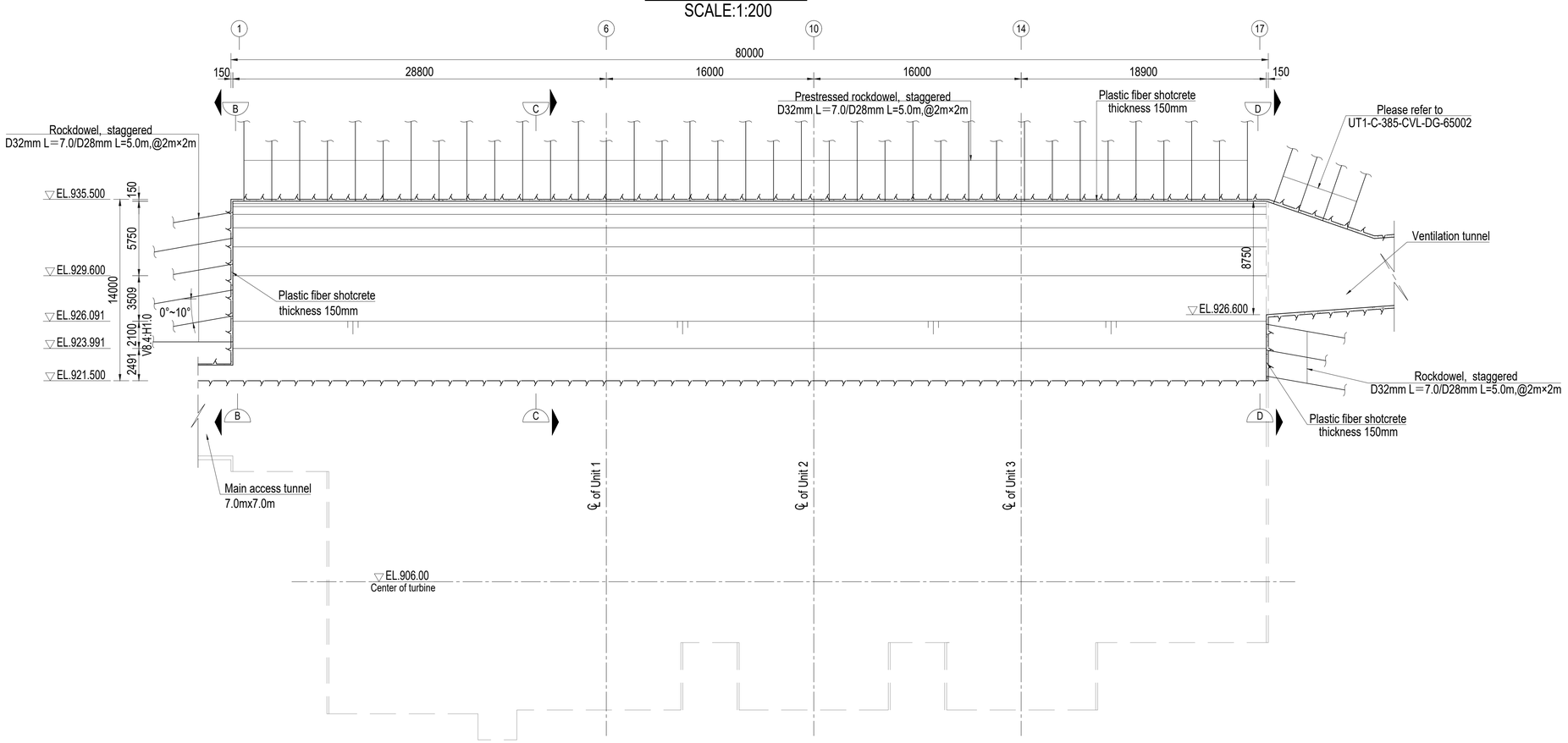
NOTE

1. All dimensions are in millimeters, and coordinates, chainages & elevations are in meters.
2. As per available information at present, rock class of underground powerhouse is assumed as II or III, supports shown on this set of drawings are applied to class II only.
3. Symbol description:
   R-denotes round bar, yield strength is 280MPa.
   D-denotes deformed bar, yield strength is 500MPa.
4. The cylinder specified compressive strength of shotcrete at 28 days is 25MPa.
5. Outline below EL.925.10m is only sketched and is subjected to final design of powerhouse and subsequent drawings.
6. The number of pre-stressed ROCKDOWELs at crown area can be adjusted as indication by OE on site as per exposed geological conditions.
7. The pre-stress applied to crown ROCKDOWELs is taken as 50% of the allowable tensile strength of ROCKDOWEL times section area of rebar.
8. To rockdowels adjacent to main access tunnel, I.P.B tunnel, the dip angle shall be adjusted to horizontal to avoid be penetrated into such tunnel opening.

Scale: 1:200 0 2 4 6 8 10m

SECTION A-A

SCALE:1:200



REFERENCE DRAWINGS

UT1-C-000-CVL-DG-40001	Detailed Design Drawing of Excavation and Support for Underground Cavern
UT1-C-000-CVL-DG-64002	Excavation and Support of Access Tunnel to Powerhouse
UT1-C-385-CVL-DG-65002	Excavation and Initial Support Drawing of Investigation Tunnel for Powerhouse

SYMBOL AND LEGEND

FOR APPROVAL

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REV. NO.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
0A	22,May,2022	FIRST ISSUE	DONG Z.Z.	ZHANG J.Q.	ZHANG FAN LI W.G.

PROJECT TITLE

Upper Trishuli-1 HEP (216MW)

OWNER

NWEDC NEPAL WATER AND ENERGY DEVELOPMENT CO. PVT. LTD.

OWNER'S ENGINEER

TRACTEBEL ENGIE jade CONSULT

CONTRACTOR

DOOSAN Enerbility

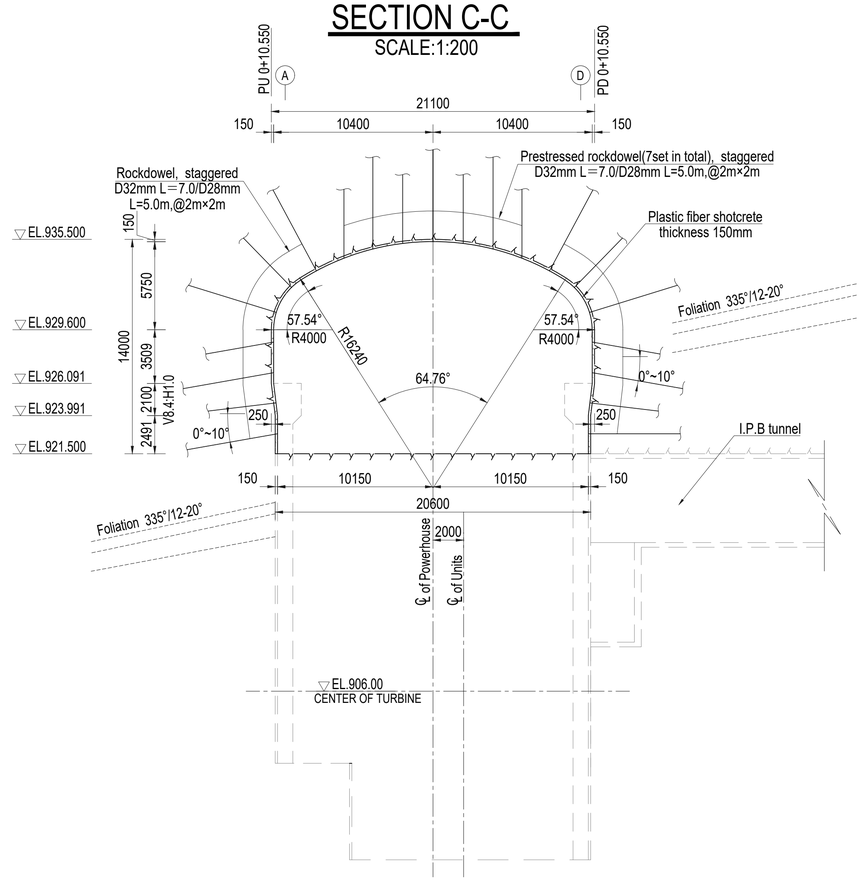
DRAWING TITLE

EXCAVATION AND SUPPORT DRAWING OF POWERHOUSE CAVERN (ABOVE EL.921.50m) (1/2)

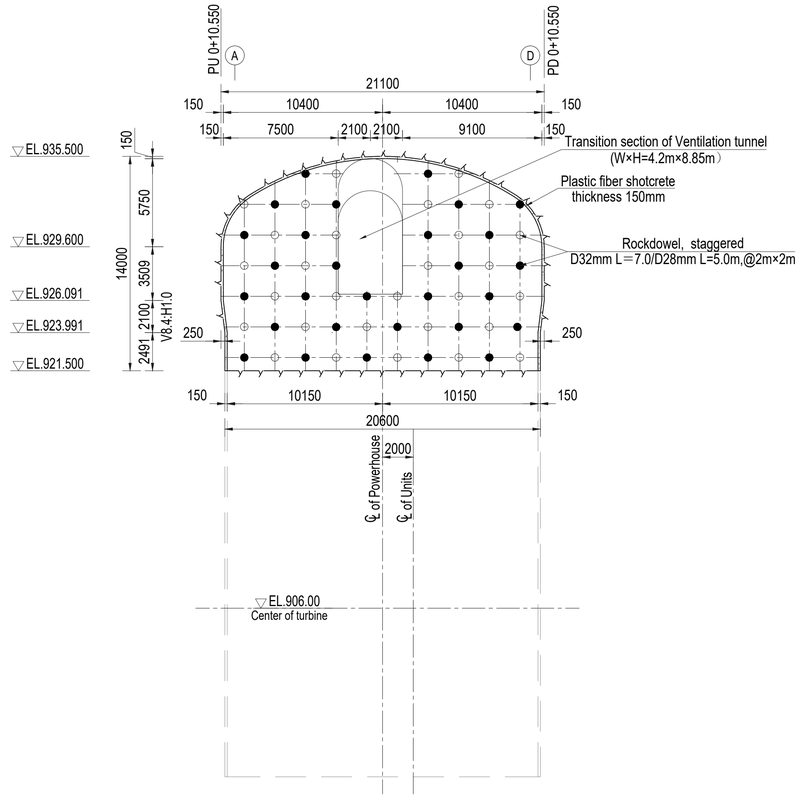
INDEX	DRAWING NUMBER	SHEET NO.	REV. NO.
A	UT1-C-300-CVL-DG-60002-01	1 OF 2	0A

A1 (594 x 841 MM)

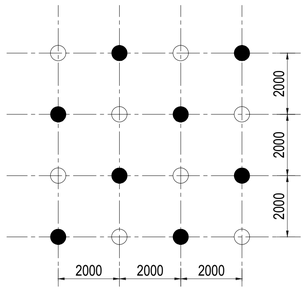
SECTION C-C
SCALE:1:200



SECTION D-D
SCALE:1:200



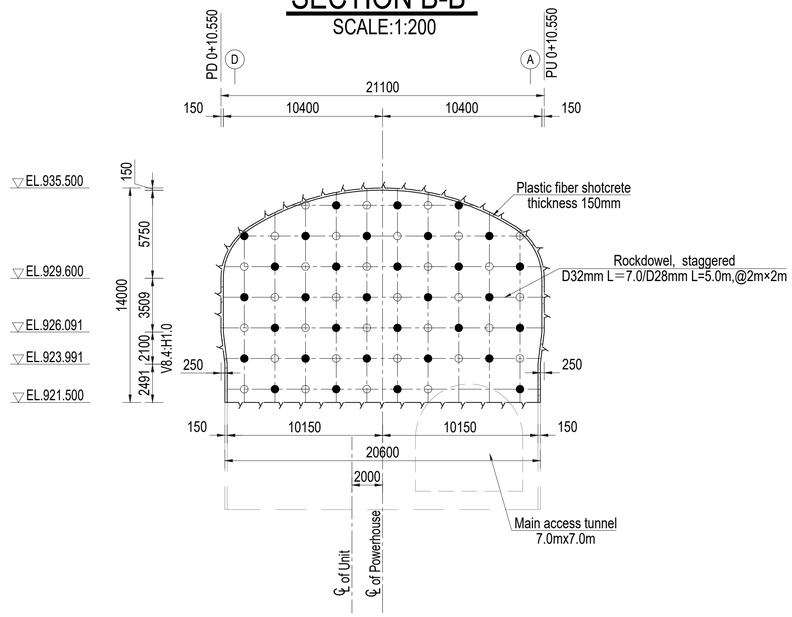
ARRANGEMENT OF ROCKDOWEL
SCALE:1:100



COORDINATES OF CONTROL POINTS

No.	E(m)	N(m)	Remark
U1	619078.651	3107046.174	Center of Unit 1
U2	619094.635	3107045.458	Center of Unit 2
U3	619110.619	3107044.743	Center of Unit 3

SECTION B-B
SCALE:1:200



NOTE

1. All dimensions are in millimeters, and coordinates, chainages & elevations are in meters.
2. Other notes please refer to sheet 1.

Legend:

○ Rockdowel, D32mm L=7.0

● Rockdowel, D28mm L=5.0

Scale:

1:100 0 1 2 3 4 5m

1:200 0 2 4 6 8 10m

REFERENCE DRAWINGS

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TRACTEBEL ENGIE jade CONSULT

CONTRACTOR

DOOSAN Enerbility

DRAWING TITLE

EXCAVATION AND SUPPORT DRAWING OF POWERHOUSE CAVERN (ABOVE EL.921.50m) (2/2)

INDEX	DRAWING NUMBER	SHEET NO.	REV. NO.
A	UT1-C-300-CVL-DG-60002-02	2 OF 2	0A

A1 (594 x 841 MM)